

IN THE CLAIMS

1. (Currently Amended) An apparatus, comprising:

a point light source;

a photodetector;

a lens, positioned in [the] a same side of [said] the point light source and [said] the photodetector, [said] the lens configured to focus a light from [said] the point light source onto a target area of an object through [said] the lens, and further configured to focus a reflected light from [said] the target area of [said] the object onto [said] the photodetector through [said] the lens;

wherein [said] the object comprises a test strip comprising a light-absorbing area configured to occur in response to a specific component of a tested solution contacting therewith and further configured to absorb [said] the light emitting from [said] the point light source; and

wherein [said] the point light source is configured to radiate a light with a first wavelength and a light with a second wavelength, wherein [said] the tested solution contained in [said] the light-absorbing area of [said] the test strip is configured to absorb [said] the light with the first wavelength, wherein a sampling amount of [said] the tested solution is determined in accordance with [the] a reflectance of [said] the light with the first wavelength from [said] the light-absorbing area, wherein [said] the light-absorbing area is configured to occur in response to [said] the specific component of [said] the tested solution and is further configured to absorb [said] the light with the second wavelength, and wherein a content of [said] the specific component is determined in accordance with [the] a reflectance of [said] the light with the second wavelength from [said] the light-absorbing area.

2. (Currently Amended) The apparatus of claim 1, further comprising a holder configured to hold [said] the point light source at a first end thereof and further configured to hold [said] the photodetector at a second end thereof, opposite [said] the first end.

3. (Currently Amended) The apparatus of claim 1, wherein [said] the object is located at a focal position of [said] the lens.

4. (Currently Amended) The apparatus of claim 1, wherein [said] the point light source comprises a light emitting diode.

5. (Currently Amended) The apparatus of claim 1, wherein [said] the photodetector is configured to generate a response current in response to [said] the reflected light from [said] the target area of [said] the object.

6. (Currently Amended) The apparatus of claim 5, wherein [said] the photodetector comprises one or more of the following: a photodiode, a charge-coupled device, a complex metal oxide semiconductor sensor, or combinations thereof.

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) The apparatus of claim 1, wherein [said] the specific component of [said] the tested solution to be detected by the photodetector depends on an enzyme system contained in [said] the test strip.

10. (Previously Presented) The apparatus of claim 9, further comprising means for monitoring a concentration of glucose in a blood sample.

11. (Previously Presented) The apparatus of claim 9, further comprising means for monitoring a concentration of cholesterol in a blood sample.

12. (Currently Amended) An apparatus, comprising:
a holder;
a point light source disposed at a first edge of [said] the holder;
a photodetector disposed at a second edge of [said] the holder opposite [said] the first edge, [said] the first edge and [said] the second edge formed on [the] a same side of [said] the holder; and
a lens disposed at [the] a same side of [said] the point light source and [said] the photodetector, [said] the lens configured to focus a light from [said] the point light source through [said] the lens onto a target area of an object placed at a focal position of [said] the lens, and further configured to focus a reflected light from [said] the target area of [said] the object onto [said] the photodetector through [said] the lens.

13. (Currently Amended) The apparatus of claim 12, wherein:
[said] the point light source radiates a light with a first wavelength and a second wavelength at a tested solution in the target area of the object; and
the photodetector determines a sampling amount of [said] the tested solution on the object in accordance with a reflectance of [said] the reflected light with the first wavelength and determines a content of a component in [said] the tested solution in accordance with a reflectance of [said] the reflected light with the second wavelength.

14. (Currently Amended) The apparatus of claim 12, wherein [said] the photodetector is configured to generate a response current in response to [said] the reflected light from [said] the target area of [said] the object.

15. (Currently Amended) The apparatus of claim 14, wherein [said] the photodetector comprises one or more of the following: a photodiode, a charge-coupled device, a complex metal oxide semiconductor sensor, or combinations thereof.

16. (Currently Amended) The apparatus of claim 12, wherein [said] the object comprises a test strip comprising a light-absorbing area configured to occur in response

to a specific component of a tested solution contacting therewith, and further configured to absorb [said] the light emitting from [said] the point light source.

17.-30. (Cancelled)

31. (Currently Amended) A method, comprising:

emitting a light onto a target area of an object via a light source located at a first end of a holder;

detecting a reflected light from [said] the target area of [said] the object via a photodetector located at a second end of [said] the holder, opposite [said] the first end;

focusing [said] the light onto [said] the target area of [said] the object via a lens;

focusing [said] the reflected light onto [said] the photodetector via [said] the lens;

radiating the light with a first wavelength and a second wavelength via [said] the point light source onto a tested solution on [said] the object;

detecting an amount of [absorbsion] absorption of [said] the light with the first wavelength via [said] the tested solution contained on [said] the object; and

detecting an amount of [absorbsion] absorption of [said] the light with the second wavelength via [said] the tested solution contained on [said] the object.

32. (Currently Amended) The method of claim 31, further comprising locating [said] the object at a focal position of [said] the lens.

33. (Currently Amended) The method of claim 31, further comprising using a light emitting diode to emit the light onto [said] the target area of [said] the object.

34. (Currently Amended) The method of claim 31, further comprising generating a response current in response to [said] the reflected light via [said] the photodetector.

35. (Currently Amended) The method of claim 34, further comprising using one or more of a photodiode, a charge-coupled device, a complex metal oxide semiconductor sensor, or combinations thereof to detect the reflected light from [said] the target area of [said] the object.

36. (Currently Amended) The method of claim 31, wherein [said] the target area of [said] the object comprises a light-absorbing area with a specific component of a tested solution capable of absorbing [said] the light from [said] the light source.

37. (Currently Amended) A method, comprising:
emitting a point of light onto a target area of an object via a point light source located at a first end of a holder;
detecting a reflected light from [said] the target area of [said] the object via a photodetector located at a second end of [said] the holder, opposite [said] the first end;
focusing [said] the point of light onto [said] the target area of [said] the object via a lens positioned to [the] a same side of [said] the point light source and [said] the photodetector;
focusing [said] the reflected light onto [said] the photodetector via [said] the lens;
producing a light-absorbing area on [said] the object in response to a specific component of a tested solution contacting therewith, wherein [said] the light-absorbing area is configured to absorb [said] the light emitting from [said] the point light source;
radiating the point of light with a first wavelength and a second wavelength via [said] the point light source, absorbing [said] the point of light with the first wavelength via [said] the tested solution contained in [said] the light-absorbing area, and absorbing [said] the point of light with the second wavelength via [said] the tested solution.

38. (Currently Amended) The method of claim 36, wherein [said] the specific component of [said] the tested solution depends on an enzyme system contained in [said] the object.

39. (Previously Presented) The method of claim 38, further comprising monitoring a concentration of glucose in a blood sample.

40. (Previously Presented) The method of claim 38, further comprising monitoring a concentration of cholesterol in a blood sample.

41. (Currently Amended) The method of claim 31, further comprising:
determining a sampling amount of [said] the tested solution in accordance with a reflectance of [said] the reflected light with the first wavelength from [said] the target area[[,]]; and
determining a content of a component in [said] the tested solution in accordance with a reflectance of [said] the reflected light with the second wavelength from [said] the target area.

42.-45. (Cancelled)